

How to Build EUROPA₂

Software Requirements

- Jam 2.5 - An automated build system (*replacement for make*)
- Java 1.5 - A platform independent programming language and runtime.
- Doxygen - An automated documentation generator. (*required only to generate API documentation*)

Commonly already installed on POSIX systems:

- GCC 3.3+ - GNU Compiler Collection.
- Perl - A general purpose scripting language, used for some utility scripts in PLASMA. (*not strictly required*)
- SSH (client) - A secure replacement for remote shells, cvs will communicate over ssh streams.
- SWIG - Tool that allows us to expose C++ interfaces in Java and other languages
- CVS (client) - Concurrent Versions System, for acquiring the EUROPA₂ source code.

While not currently officially supported EUROPA₂ should run on Windows:

- Cygwin - A POSIX environment for Microsoft Windows.

Checkout

Configure your environment for CVS, such that it uses ssh to wrap its connection to wow. In bash:

```
export CVS_RSH=ssh
```

In csh:

```
setenv CVS_RSH ssh
```

Checkout the two packages that EUROPA₂ is composed of.

```
cvs checkout -d wow.arc.nasa.gov:/home/cvs/ISG-Repository PLASMA
cvs checkout -d wow.arc.nasa.gov:/home/cvs/ISG-Repository PlanWorks
```

Common Targets

- run-all-tests
 - ◆ run-checkin-tests
 - ◆ run-all-module-tests
 - ◆ run-examples-tests
 - ◆ run-nddl-tests
- clean-all

Build Options

VARIANTS

- DEV - Compile with all error detection enabled, and without optimization enabled in gcc. This is the default option, but not necessarily the best one.
- OPTIMIZED - Compile with error detection disabled, and with optimization enabled in gcc. Error checking is disabled to remove its high runtime expense. Optimization also improves runtime costs, but at the expense of longer compile times.
- PROFILE - The same as DEV, but with profiling information in gcc enabled.

LIBRARIES

- SHARED - Compile with shared libraries, or dynamic libraries if you're using OS X.
- STATIC - Compile with statically linked libraries.
- NONE - Compile without generating libraries at all, all code is linked into executables. *(This option is no longer officially supported, although it should still function)*